```
UUU         UUU  EEEEEEEEEEEEEEE  TTTTTTTTTTTTTTT  PPPPPPPPPPPP        SSSSSSSSSSSS  YYY         YYY
UUU         UUU  EEEEEEEEEEEEEEE  TTTTTTTTTTTTTTT  PPPPPPPPPPPP        SSSSSSSSSSSS  YYY         YYY
UUU         UUU  EEEEEEEEEEEEEEE  TTTTTTTTTTTTTTT  PPPPPPPPPPPP        SSSSSSSSSSSS  YYY         YYY
UUU         UUU  EEE                    TTT        PPP         PPP  SSS              YYY         YYY
UUU         UUU  EEE                    TTT        PPP         PPP  SSS              YYY         YYY
UUU         UUU  EEE                    TTT        PPP         PPP  SSS              YYY         YYY
UUU         UUU  EEE                    TTT        PPP         PPP  SSS                 YYY   YYY
UUU         UUU  EEE                    TTT        PPP         PPP  SSS                 YYY   YYY
UUU         UUU  EEE                    TTT        PPP         PPP  SSS                 YYY   YYY
UUU         UUU  EEEEEEEEEEEE           TTT        PPPPPPPPPPPP        SSSSSSSSS               YYY
UUU         UUU  EEEEEEEEEEEE           TTT        PPPPPPPPPPPP        SSSSSSSSS               YYY
UUU         UUU  EEEEEEEEEEEE           TTT        PPPPPPPPPPPP        SSSSSSSSS               YYY
UUU         UUU  EEE                    TTT        PPP                          SSS            YYY
UUU         UUU  EEE                    TTT        PPP                          SSS            YYY
UUU         UUU  EEE                    TTT        PPP                          SSS            YYY
UUU         UUU  EEE                    TTT        PPP                          SSS            YYY
UUU         UUU  EEE                    TTT        PPP                          SSS            YYY
UUU         UUU  EEE                    TTT        PPP                          SSS            YYY
UUUUUUUUUUUUUUU  EEEEEEEEEEEEEEE        TTT        PPP              SSSSSSSSSSSS               YYY
UUUUUUUUUUUUUUU  EEEEEEEEEEEEEEE        TTT        PPP              SSSSSSSSSSSS               YYY
UUUUUUUUUUUUUUU  EEEEEEEEEEEEEEE        TTT        PPP              SSSSSSSSSSSS               YYY
```

```
_$


Va
--
00
00
00
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48
7F
7F
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7F
```

```
**FILE**ID**SATSSF01
```

```
  SSSSSSSS    AAAAAA    TTTTTTTTTT    SSSSSSSS    SSSSSSSS  FFFFFFFFFF    000000        11
  SSSSSSSS    AAAAAA    TTTTTTTTTT    SSSSSSSS    SSSSSSSS  FFFFFFFFFF    000000        11
SS          AA      AA      TT      SS          SS          FF          00      00    1111
SS          AA      AA      TT      SS          SS          FF          00      00    1111
SS          AA      AA      TT      SS          SS          FF          00    0000      11
SS          AA      AA      TT      SS          SS          FF          00    0000      11
  SSSSSS    AA      AA      TT        SSSSSS      SSSSSS    FFFFFFFF    00  00  00      11
  SSSSSS    AA      AA      TT        SSSSSS      SSSSSS    FFFFFFFF    00  00  00      11
        SS  AAAAAAAAAA      TT              SS          SS  FF          0000    00      11
        SS  AAAAAAAAAA      TT              SS          SS  FF          0000    00      11
        SS  AA      AA      TT              SS          SS  FF          00      00      11
        SS  AA      AA      TT              SS          SS  FF          00      00      11            ....
SSSSSSSS    AA      AA      TT      SSSSSSSS    SSSSSSSS    FF            000000      111111          ....
SSSSSSSS    AA      AA      TT      SSSSSSSS    SSSSSSSS    FF            000000      111111          ....

LL            IIIIII      SSSSSSSS
LL            IIIIII      SSSSSSSS
LL              II      SS
LL              II      SS
LL              II      SS
LL              II      SS
LL              II        SSSSSS
LL              II        SSSSSS
LL              II              SS
LL              II              SS
LL              II              SS
LL              II              SS
LLLLLLLLLL    IIIIII    SSSSSSSS
LLLLLLLLLL    IIIIII    SSSSSSSS
```

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```

```
0000            .TITLE  SATSSF01 - SATS SYSTEM SERVICE TESTS  (FAILING S.C.)
0000            .IDENT  'V04-000'
0000
0000    ;
0000    ;****************************************************************************
0000    ;*                                                                          *
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0000    ;*                                                                          *
0000    ;*                                                                          *
0000    ;****************************************************************************
0000    ;
0000
0000    ;++
0000    ; FACILITY:     SATS SYSTEM SERVICE TESTS
0000    ;
0000    ; ABSTRACT:     The SATSSF01 module tests the execution of the following
0000    ; VMS system services, invoked in such a way as to expect failing
0000    ; status codes:
0000    ;               $DACEFC
0000    ;               $DLCEFC
0000    ;               $ASCEFC
0000    ;               $SETEXV
0000    ;
0000    ;
0000    ; ENVIRONMENT:  User mode image; needs CMKRNL privilege,
0000    ;               dynamically acquires other privileges, as needed.
0000    ;
0000    ; AUTHOR: THOMAS L. CAFARELLA,          CREATION DATE: AUG, 1978
0000    ;         PAUL D. FAY (DISPSERV & TESTSERV MACROS)
0000    ;
0000    ; MODIFIED BY:
0000    ;
0000    ;       V03-001 LDJ0001         Larry D. Jones,         17-Sep-1980
0000    ;               Modified to conform to new build command procedures.
0000    ;**
0000    ;--
```

```
                  0000    .SBTTL  DECLARATIONS
                  0000    ;
                  0000    ; MACRO LIBRARY CALLS
                  0000    ;
                  0000            $PRVDEF                         ; privilege definitions
                  0000            $UETPDEF                        ; UETP message definitions
                  0000            $SHR_MESSAGES UETP,116,<<TEXT,INFO>> ; UETP$_TEXT definition
                  0000            $PHDDEF                         ; process header definitions
                  0000            $PCBDEF                         ; PCB definitions
                  0000            $SSDEF                          ; SS definitions
                  0000            $STSDEF                         ; STS definitions
                  0000    ;
                  0000    ; Equated symbols
                  0000    ;
        00000000  0000    WARNING         = 0                     ; warning severity value for msgs
        00000001  0000    SUCCESS         = 1                     ; success     ''      ''    ''  ''
        00000002  0000    ERROR           = 2                     ; error       ''      ''    ''  ''
        00000003  0000    INFO            = 3                     ; information ''      ''    ''  ''
        00000004  0000    SEVERE          = 4                     ; fatal       ''      ''    ''  ''
        00000001  0000    PRVHND_SXV40    = 1                     ; page 0 address for SETEXV
                  0000
```

```
                                      0000     76          .SBTTL  OWN STORAGE
                                  00000000     77          .PSECT  RODATA,RD,NOWRT,NOEXE,LONG
                                      0000     78 ;
                                      0000     79 TEST_MOD_NAME:
         31 30 46 53 53 54 41 53 00'  0000     80          .ASCIC  /SATSSF01/                ; needed for SATSMS message
                                 08   0000
                                      0009     81 TEST_MOD_NAME_D:
46 53 53 54 41 53 00000011'010E0000'  0009     82          .ASCID  /SATSSF01/                ; module name
                              31 30   0017
                                      0019     83 TEST_MOD_BEGIN:
                  6E 75 67 65 62 00'  0019     84          .ASCIC  /begun/
                                 05   0019
                                      001F     85 TEST_MOD_SUCC:
   6C 75 66 73 73 65 63 63 75 73 00'  001F     86          .ASCIC  /successful/
                                 0A   001F
                                      002A     87 TEST_MOD_FAIL:
               64 65 6C 69 61 66 00'  002A     88          .ASCIC  /failed/
                                 06   002A
                                      0031     89 DACEFC:
               43 46 45 43 41 44 00'  0031     90          .ASCIC  /DACEFC/
                                 06   0031
                                      0038     91 DLCEFC:
               43 46 45 43 4C 44 00'  0038     92          .ASCIC  /DLCEFC/
                                 06   0038
                                      003F     93 ASCEFC:
               43 46 45 43 53 41 00'  003F     94          .ASCIC  /ASCEFC/
                                 06   003F
                                      0046     95 SETEXV:
               56 58 45 54 45 53 00'  0046     96          .ASCIC  /SETEXV/
                                 06   0046
                                      004D     97 INADR:
                 00000000'00000000'   004D     98          .LONG   NOACCESS,NOACCESS         ; page address of noaccess psect
                                      0055     99 PROT:
                          00000000'   0055    100          .LONG   PRT$C_NA                  ; protection code for no access psect
                                      0059    101 NAME_DLC:
      43 4C 44 46 53 00000061'010E0000'  0059 102          .ASCID  /SFDLC/                   ; legal name string
                                      0066    103 NAME_DLC0:
                 0000006E'010E0000'   0066    104          .ASCID  //                        ; zero length string
                                      006E    105 NAME_DLC15:
54 20 45 52 4F 4D 00000076'010E0000'  006E    106          .ASCID  /MORE THAN 15 CHARACTERS/ ; illegal string length test string
41 52 41 48 43 20 35 31 20 4E 41 48   007C
                     53 52 45 54 43   0088
                                      008D    107 VECTOR_SXV:
                           00000000   008D    108          .LONG   0                         ; vector parameter for SETEXV
                                      0091    109 ACMODE_SXV:
                           00000001   0091    110          .LONG   1                         ; access mode param. for SETEXV
                                      0095    111 PRVHND_SXV41:
                           00000000   0095    112          .LONG   0                         ; readonly access for SETEXV
                                      0099    113 CS1:
21 20 74 73 65 54 000000A1'010E0000'  0099    114          .ASCID  \Test !AC service name !AC step !UL failed.\
6E 20 65 63 69 76 72 65 73 20 43 41   00A7
70 65 74 73 20 43 41 21 20 65 6D 61   00B3
2E 64 65 6C 69 61 66 20 4C 55 21 20   00BF
                                      00CB    115 CS2:
74 63 65 70 78 45 000000D3'010E0000'  00CB    116          .ASCID  \Expected !AS = !XL received !AS = !XL\
4C 58 21 20 3D 20 53 41 21 20 64 65   00D9
41 21 20 64 65 76 69 65 63 65 72 20   00E5
```

```
                  4C 58 21 20 3D 20 53  00F1
                                        00F8    117 CS3:
74 63 65 70 78 45 00000100'010E0000'  00F8    118           .ASCID  \Expected !AS!UB = !XL received !AS!UB = !XL\
20 3D 20 42 55 21 53 41 21 20 64 65  0106
64 65 76 69 65 63 65 72 20 4C 58 21  0112
58 21 20 3D 20 42 55 21 53 41 21 20  011E
                                  4C  012A
                                        012B    119 EXP:
73 75 74 61 74 73 00000133'010E0000'  012B    120           .ASCID  \status\
                                 0139    122 ;
                                 0139    123         .SBTTL  R/W PSECT
                             00000000    124         .PSECT  RWDATA,RD,WRT,NOEXE,LONG
                                 0000    125 ;
                                 0000    126 TPID:
                        00000000 0000    127         .LONG   0                       ; PID for this process
                                 0004    128 CURRENT_TC:
                        00000000 0004    129         .LONG   0                       ; ptr to current test case
                                 0008    130         .ALIGN LONG
                                 0008    131 REG_SAVE_AREA:
                        00000044 0008    132         .BLKL   15                      ; register save area
                                 0044    133 MOD_MSG_CODE:
                        007480D9 0044    134         .LONG   UETP$_SATSMS            ; test module message code for putmsg
                                 0048    135 TMN_ADDR:
                       00000000' 0048    136         .ADDRESS TEST_MOD_NAME
                                 004C    137 TMD_ADDR:
                       00000019' 004C    138         .ADDRESS TEST_MOD_BEGIN
                                 0050    139 PRVPRT:
                              00 0050    140         .BYTE   0                       ; protection return byte for SETPRT
                                 0051    141 PRIVMASK:
               00000000 00000000 0051    142         .QUAD   0                       ; priv. mask
                                 0059    143 CHM_CONT:
                        00000000 0059    144         .LONG   0                       ; change mode continue address
                                 005D    145 RETADR:
                        00000065 005D    146         .BLKL   2                       ; returned address's from SETPRT
                                 0065    147 DAC:
                                 0065    148         $DACEFC 0                       ; DACEFC parameter list
                                 006D    149 DLC:
                                 006D    150         $DLCEFC NAME_DLCO                       ; DLCEFC parameter list
                                 0075    151 ASC:
                                 0075    152         $ASCEFC 0,0,0,1                 ; ASCEFC parameter list
                                 0089    153 SET:
                                 0089    154         $SETEXV VECTOR_SXV,0,ACMODE_SXV,PRVHND_SXV40 ; SETEXV parameter list
                                 009D    155 REG:
74 73 69 67 65 72 000000A5'010E0000' 009D    156         .ASCID  \register R\
                     52 20 72 65 00AB
                                 00AF    157 REGNUM:
                        00000000 00AF    158         .LONG   0                       ; register number
                                 00B3    159 MSGL:
                        00000050 00B3    160         .LONG   80                      ; buffer desc.
                       000000BB' 00B7    161         .ADDRESS BUF
                                 00BB    162 BUF:
                        0000010B 00BB    163         .BLKB   80
                                 010B    164 MESSAGEL:
                        00000000 010B    165         .LONG   0                       ; message desc.
                       000000BB' 010F    166         .ADDRESS        BUF
                                 0113    167 SERV_NAME:
                        00000000 0113    168         .LONG   0                       ; service name pointer
```

```
          00000000   170             .PSECT  SATS_ACCVIO_1,RD,WRT,NOEXE,PAGE
 00000200     0000   171 EMPTY:              .BLKB   512     ; reserve a page of space
              0200   172 ;
              0200   173 ; +
              0200   174 ; *****************************************************************
              0200   175 ; *                                                               *
              0200   176 ; *      THE ORDER OF STATEMENTS IN THIS PSECT IS CRITICAL.       *
              0200   177 ; *      DO NOT RE-ARRANGE THE VARIABLES. CONSULT SATS            *
              0200   178 ; *      FUNCTIONAL SPECIFICATION FOR A DESCRIPTION OF THE USE    *
              0200   179 ; *      OF THE EMPTY PSECT (AND ITS COMPANION PSECT, NOACCESS).  *
              0200   180 ; *                                                               *
              0200   181 ; *****************************************************************
              0200   182 ; -
              0200   183 ;
 000001FF     0200   184 PRVHND_SXV42    = . - 1         ; prvhnd arg for SETEXV (last byte in the page)
 000001F3     0200   185                 . = . - 13      ; allow room for string descriptor
              01F3   186 ; type AAAAA_SSSX5 go here:
 00000006     01F3   187                 .LONG   6       ; string length (will cross psect boundary)
 000001FB'    01F7   188                 .ADDRESS .+4    ; string address
              01FB   189 ; type AAAAA_SSSX3 go here:
 000001FC     01FB   190                 .BLKB   1       ; low-order byte of string length
              01FC   191 ; type AAAAA_SSSX2 go here:
 00000200     01FC   192                 .BLKL   1       ; string length
              0200   193 ;
              0200   194 ;
              0200   195 ;
              0200   196 ;
          00000000   197             .PSECT  SATS_ACCVIO_2,RD,WRT,NOEXE,PAGE
 00000200     0000   198 NOACCESS:           .BLKB   512     ; reserve a page of space
 00000000     0200   199                 . = . - 512     ; return loc ctr to beginning of psect
 00000000'    0000   200                 .ADDRESS EMPTY  ; address of accessible string
 00000000'    0004   201                 .ADDRESS EMPTY/^X100 ; address of accessible string
              0008   202 ;+
              0008   203 ; *** NOTE -- DO NOT CHANGE LOCATION OR SEQUENCE OF ABOVE STATEMENTS!
              0008   204 ; ***         THIS PSECT (NOACCESS) MUST APPEAR IN MEMORY IMMEDIATELY
              0008   205 ; ***         FOLLOWING THE EMPTY PSECT. PSECT NAMES AND OPTIONS WILL BE
              0008   206 ; ***         CHOSEN TO FORCE THE DESIRED PSECT ORDERING.
              0008   207 ;-
              0008   208 ;
              0008   209 ;
              0008   210 ;
              0008   211 ;
```

```
00000000          .PSECT  SATSSF01,RD,WRT,EXE,LONG
    0000          .SBTTL  SATSSF01
    0000    ;++
    0000    ; FUNCTIONAL DESCRIPTION:
    0000    ;
    0000    ;         After performing some initial housekeeping, such as
    0000    ; printing the module begin message and acquiring needed privileges,
    0000    ; the system services are tested in each of their failure conditions.
    0000    ; Detected failures are identified and  an error message is printed
    0000    ; on the terminal.  Upon completion of the test a success or fail
    0000    ; message is printed on the terminal.
    0000    ;
    0000    ; CALLING SEQUENCE:
    0000    ;
    0000    ;         $ RUN SATSSF01  ...  (DCL COMMAND)
    0000    ;
    0000    ; INPUT PARAMETERS:
    0000    ;
    0000    ;         none
    0000    ;
    0000    ; IMPLICIT INPUTS:
    0000    ;
    0000    ;         none
    0000    ;
    0000    ; OUTPUT PARAMETERS:
    0000    ;
    0000    ;         none
    0000    ;
    0000    ; IMPLICIT OUTPUTS:
    0000    ;
    0000    ;         Messages to SYS$OUTPUT are the only output from SATSSF01.
    0000    ;         They are of the form:
    0000    ;
    0000    ;                 %UETP-S-SATSMS, TEST MODULE SATSSF01 BEGUN ... (BEGIN MSG)
    0000    ;                 %UETP-S-SATSMS, TEST MODULE SATSSF01 SUCCESSFUL ... (END MSG)
    0000    ;                 %UETP-E-SATSMS, TEST MODULE SATSSF01 FAILED ... (END MSG)
    0000    ;                 %UETP-I-TEXT, ... (VARIABLE INFORMATION ABOUT A TEST MODULE FAILURE)
    0000    ;
    0000    ; COMPLETION CODES:
    0000    ;
    0000    ;         The SATSSF01 routine terminates with a $EXIT to the
    0000    ;         operating system with a status code defined by UETP$_SATSMS.
    0000    ;
    0000    ; SIDE EFFECTS:
    0000    ;
    0000    ;         none
    0000    ;
    0000    ;--
    0000
    0000
    0000
    0000          TEST_START SATSSF01             ; let the test begin
```

```
                              0000
                        0000  0000                    .ENTRY SATSSF01,0
             0004'CF      D4  0002                    CLRL    W^CURRENT_TC
                  00      DD  0006                    PUSHL   #0
             0000'CF      DF  0008                    PUSHAL  W^TPID
       00000000'GF  02    FB  000C                    CALLS   #2,G^SYS$WAKE
       00000000'GF  00    F8  0013                    CALLS   #0,G^SYS$HIBER
             0009'CF      7F  001A                    PUSHAQ  W^TEST_MOD_NAME_D
       00000000'GF  01    FB  001E                    CALLS   #1,G^SYS$SETPRN
                05AD      30  0025                    BSBW    W^MOD_MSG_PRINT
        004C'CF  001F'CF  DE  0028                    MOVAL   W^TEST_MOD_SUCC,W^TMD_ADDR
  0044'CF   03   00  01   F0  002F                    INSV    #SUCCESS,#0,#3,W^MOD_MSG_CODE
                  00      DD  0036                    PUSHL   #0
        04DC'CF   01      FB  0038                    CALLS #1,W^REG_SAVE
                              003D        STP0:
                              003D             $SETPRT_S INADR=W^INADR, RETADR=W^RETADR, -
                              003D                   PROT=W^PROT, PRVPRT=W^PRVPRT ; set noaccess psect
                              0056                                                ; ... for no user access
                              0056        .SBTTL DACEFC TESTS
                              0056        ;+
                              0056        ;
                              0056        ; $DACEFC tests
                              0056        ; test for an EFN of 0
                              0056        ;
                              0056        ;-
      0113'CF   0031'CF   DE  0056             MOVAL   W^DACEFC,W^SERV_NAME     ; set service name
                              005D             $DACEFC_G W^DAC
                              0066             FAIL_CHECK SS$_ILLEFC            ; check for correct failure
        000000EC 8F       DD  0066                    PUSHL   #SS$_ILLEFC
        04E6'CF   01      FB  006C                    CALLS   #1,W^REG_CHECK
                              0071             $DACEFC_S #0                     ; check _S form
                              007A             FAIL_CHECK SS$_ILLEFC            ; check for correct failure
        000000EC 8F       DD  007A                    PUSHL   #SS$_ILLEFC
        04E6'CF   01      FB  0080                    CALLS   #1,W^REG_CHECK
                              0085        ;+
                              0085        ;
                              0085        ; test for a non-zero but less than 64 EFN
                              0085        ;
                              0085        ;-
                              0085             NEXT_TEST
                              0085
                              0085        STP1:
        0004'CF   01      D0  0085                    MOVL    #1,W^CURRENT_TC
                  00      DD  008A                    PUSHL   #0
        04DC'CF   01      FB  008C                    CALLS   #1,W^REG_SAVE
        0069'CF   3F      D0  0091             MOVL    #63,W^DAC+DACEFC$_EFN    ; set EFN
                              0096             $DACEFC_G W^DAC
                              009F             FAIL_CHECK SS$_ILLEFC            ; check for correct failure
        000000EC 8F       DD  009F                    PUSHL   #SS$_ILLEFC
        04E6'CF   01      FB  00A5                    CALLS   #1,W^REG_CHECK
                              00AA             $DACEFC_S #63                    ; check the _S form
                              00B3             FAIL_CHECK SS$_ILLEFC            ; check for correct failure
        000000EC 8F       DD  00B3                    PUSHL   #SS$_ILLEFC
        04E6'CF   01      FB  00B9                    CALLS   #1,W^REG_CHECK
                              00BE        ;+
                              00BE        ;
                              00BE        ; test for a non-zero but greater than 127
```

```
                             00BE    294 ;
                             00BE    295 ;-
                             00BE    296            NEXT_TEST
                             00BE
                             00BE            STP2:
          0004'CF    02    D0  00BE                          MOVL    #2,W^CURRENT_TC
                     00    DD  00C3                          PUSHL   #0
          04DC'CF    01    FB  00C5                          CALLS   #1,W^REG_SAVE
0069'CF   00000080   8F    D0  00CA    297            MOVL    #128,W^DAC+DACEFC$_EFN  ; set EFN
                               00D3    298            $DACEFC_G W^DAC
                               00DC    299            FAIL_CHECK SS$_ILLEFC         ; check for correct failure
           000000EC  8F    DD  00DC                          PUSHL   #SS$_ILLEFC
          04E6'CF    01    FB  00E2                          CALLS   #1,W^REG_CHECK
                               00E7    300            $DACEFC_S #128                ; check _S form
                               00F4    301            FAIL_CHECK SS$_ILLEFC         ; check for correct failure
           000000EC  8F    DD  00F4                          PUSHL   #SS$_ILLEFC
          04E6'CF    01    FB  00FA                          CALLS   #1,W^REG_CHECK
```

```
                                  00FF   .SBTTL DLCEFC TESTS
                                  00FF   ;+
                                  00FF   ;
                                  00FF   ; $DLCEFC tests
                                  00FF   ; test for a zero length cluster name
                                  00FF   ;
                                  00FF   ;-
                                  00FF           NEXT_TEST
                                  00FF
                                  00FF   STP3:
        0004'CF    03     D0      00FF                   MOVL    #3,W^CURRENT_TC
                   00     DD      0104                   PUSHL   #0
        04DC'CF    01     FB      0106                   CALLS   #1,W^REG_SAVE
0113'CF    0038'CF        DE      010B           MOVAL   W^DLCEFC,W^SERV_NAME     ; set service name
                                  0112           $DLCEFC_G W^DLC
                                  011B           FAIL_CHECK SS$_IVLOGNAM          ; check for correct failure
      00000154 8F         DD      011B                   PUSHL   #SS$_IVLOGNAM
        04E6'CF    01     FB      0121                   CALLS   #1,W^REG_CHECK
                                  0126           $DLCEFC_S W^NAME_DLC0            ; check the _S form
                                  0131           FAIL_CHECK SS$_IVLOGNAM          ; check for correct failure
      00000154 8F         DD      0131                   PUSHL   #SS$_IVLOGNAM
        04E6'CF    01     FB      0137                   CALLS   #1,W^REG_CHECK
                                  013C   ;+
                                  013C   ;
                                  013C   ; test for a non-zero but greater than 15 length cluster name
                                  013C   ;
                                  013C   ;-
                                  013C           NEXT_TEST
                                  013C
                                  013C   STP4:
        0004'CF    04     D0      013C                   MOVL    #4,W^CURRENT_TC
                   00     DD      0141                   PUSHL   #0
        04DC'CF    01     FB      0143                   CALLS   #1,W^REG_SAVE
0071'CF    006E'CF        DE      0148           MOVAL   W^NAME_DLC15,W^DLC+DLCEFC$_NAME ; set name address parameter
                                  014F           $DLCEFC_G W^DLC
                                  0158           FAIL_CHECK SS$_IVLOGNAM          ; check for correct failure
      00000154 8F         DD      0158                   PUSHL   #SS$_IVLOGNAM
        04E6'CF    01     FB      015E                   CALLS   #1,W^REG_CHECK
                                  0163           $DLCEFC_S W^NAME_DLC15           ; check the _S form
                                  016E           FAIL_CHECK SS$_IVLOGNAM          ; check for correct failure
      00000154 8F         DD      016E                   PUSHL   #SS$_IVLOGNAM
        04E6'CF    01     FB      0174                   CALLS   #1,W^REG_CHECK
                                  0179   ;+
                                  0179   ;
                                  0179   ; a test for the requirement of PRMCEB privilege is not needed
                                  0179   ; because a process, with the same UIC as the owner UIC of a
                                  0179   ; created common EFC, can delete it without having the PRMCEB
                                  0179   ; privilege.
                                  0179   ;
                                  0179   ;-
```

```
                                 0179    336 .SBTTL ASCEFC TESTS
                                 0179    337 ;+
                                 0179    338 ;
                                 0179    339 ; $ASCEFC tests
                                 0179    340 ; test for zero EFN
                                 0179    341 ;
                                 0179    342 ;-
                                 0179    343         NEXT_TEST
                                 0179
                                 0179        STP5:
          0004'CF    05    D0    0179                        MOVL    #5,W^CURRENT_TC
                     00    DD    017E                        PUSHL   #0
          04DC'CF    01    FB    0180                        CALLS   #1,W^REG_SAVE
     0113'CF   003F'CF     DE    0185    344         MOVAL   W^ASCEFC,W^SERV_NAME     ; set service name
                                 018C    345         $ASCEFC_G W^ASC
                                 0195    346         FAIL_CHECK SS$_ILLEFC            ; check for correct failure
         000000EC    8F    DD    0195                        PUSHL   #SS$_ILLEFC
          04E6'CF    01    FB    019B                        CALLS   #1,W^REG_CHECK
                                 01A0    347         $ASCEFC_S #0,W^NAME_DLC          ; check _S form
                                 01B1    348         FAIL_CHECK SS$_ILLEFC            ; check for correct failure
         000000EC    8F    DD    01B1                        PUSHL   #SS$_ILLEFC
          04E6'CF    01    FB    01B7                        CALLS   #1,W^REG_CHECK
                                 01BC    349 ;+
                                 01BC    350 ;
                                 01BC    351 ; test for non-zero but less than 64 EFN
                                 01BC    352 ;
                                 01BC    353 ;-
                                 01BC    354         NEXT_TEST
                                 01BC
                                 01BC        STP6:
          0004'CF    06    D0    01BC                        MOVL    #6,W^CURRENT_TC
                     00    DD    01C1                        PUSHL   #0
          04DC'CF    01    FB    01C3                        CALLS   #1,W^REG_SAVE
          0079'CF    3F    D0    01C8    355         MOVL    #63,W^ASC+ASCEFC$_EFN    ; set the EFN to 63
                                 01CD    356         $ASCEFC_G W^ASC
                                 01D6    357         FAIL_CHECK SS$_ILLEFC            ; check for correct failure
         000000EC    8F    DD    01D6                        PUSHL   #SS$_ILLEFC
          04E6'CF    01    FB    01DC                        CALLS   #1,W^REG_CHECK
                                 01E1    358         $ASCEFC_S #63,W^NAME_DLC         ; check _S form
                                 01F2    359         FAIL_CHECK SS$_ILLEFC            ; check for correct failure
         000000EC    8F    DD    01F2                        PUSHL   #SS$_ILLEFC
          04E6'CF    01    FB    01F8                        CALLS   #1,W^REG_CHECK
                                 01FD    360 ;+
                                 01FD    361 ;
                                 01FD    362 ; test for a non-zero but greater than 127 EFN
                                 01FD    363 ;
                                 01FD    364 ;-
                                 01FD    365         NEXT_TEST
                                 01FD
                                 01FD        STP7:
          0004'CF    07    D0    01FD                        MOVL    #7,W^CURRENT_TC
                     00    DD    0202                        PUSHL   #0
          04DC'CF    01    FB    0204                        CALLS   #1,W^REG_SAVE
  0079'CF    00000080    8F    D0    0209    366         MOVL    #128,W^ASC+ASCEFC$_EFN  ; set the EFN to 128
                                 0212    367         $ASCEFC_G W^ASC
                                 021B    368         FAIL_CHECK SS$_ILLEFC            ; check for the correct failure
         000000EC    8F    DD    021B                        PUSHL   #SS$_ILLEFC
```

```
            04E6'CF    01    FB  0221                      CALLS   #1,W^REG_CHECK
                                 0226   369         $ASCEFC_S #128,W^NAME_DLC         ; check _S form
                                 023B   370         FAIL_CHECK SS$_ILLEFC             ; check for correct failure
          000000EC 8F    DD  023B                      PUSHL   #SS$_ILLEFC
            04E6'CF    01    FB  0241                      CALLS   #1,W^REG_CHECK
                                 0246   371 ;+
                                 0246   372 ;
                                 0246   373 ; test for a legal EFN but not addressable name string
                                 0246   374 ;
                                 0246   375 ;-
                                 0246   376         NEXT_TEST
                                 0246
                                 0246       STP8:
            0004'CF    08    D0  0246                      MOVL    #8,W^CURRENT_TC
                       00    DD  024B                      PUSHL   #0
            04DC'CF    01    FB  024D                      CALLS   #1,W^REG_SAVE
    0079'CF   00000040 8F    D0  0252   377         MOVL    #64,W^ASC+ASCEFC$_EFN   ; legalize the EFN
       007D'CF    0000'CF    DE  0258   378         MOVAL   W^NOACCESS,W^ASC+ASCEFC$_NAME ; set illegal address for name
                                 0262   379         $ASCEFC_G W^ASC
                                 026B   380         FAIL_CHECK SS$_ACCVIO             ; check for correct failure
                       0C    DD  026B                      PUSHL   #SS$_ACCVIO
            04E6'CF    01    FB  026D                      CALLS   #1,W^REG_CHECK
                                 0272   381         $ASCEFC_S #64,W^NOACCESS          ; check _S form
                                 0287   382         FAIL_CHECK SS$_ACCVIO             ; check for correct failure
                       0C    DD  0287                      PUSHL   #SS$_ACCVIO
            04E6'CF    01    FB  0289                      CALLS   #1,W^REG_CHECK
                                 028E   383 ;+
                                 028E   384 ;
                                 028E   385 ; test for 0 length cluster name
                                 028E   386 ;
                                 028E   387 ;-
                                 028E   388         NEXT_TEST
                                 028E
                                 028E       STP9:
            0004'CF    09    D0  028E                      MOVL    #9,W^CURRENT_TC
                       00    DD  0293                      PUSHL   #0
            04DC'CF    01    FB  0295                      CALLS   #1,W^REG_SAVE
       007D'CF    0066'CF    DE  029A   389         MOVAL   W^NAME_DLC0,W^ASC+ASCEFC$_NAME ; set 0 length name
                                 02A1   390         $ASCEFC_G W^ASC
                                 02AA   391         FAIL_CHECK SS$_IVLOGNAM           ; check for correct failure
          00000154 8F    DD  02AA                      PUSHL   #SS$_IVLOGNAM
            04E6'CF    01    FB  02B0                      CALLS   #1,W^REG_CHECK
                                 02B5   392         $ASCEFC_S #64,W^NAME_DLC0         ; check _S form
                                 02CA   393         FAIL_CHECK SS$_IVLOGNAM           ; check for correct failure
          00000154 8F    DD  02CA                      PUSHL   #SS$_IVLOGNAM
            04E6'CF    01    FB  02D0                      CALLS   #1,W^REG_CHECK
                                 02D5   394 ;+
                                 02D5   395 ;
                                 02D5   396 ; test for greater than 15 length cluster name
                                 02D5   397 ;
                                 02D5   398 ;-
                                 02D5   399         NEXT_TEST
                                 02D5
                                 02D5       STP10:
            0004'CF    0A    D0  02D5                      MOVL    #10,W^CURRENT_TC
                       00    DD  02DA                      PUSHL   #0
            04DC'CF    01    FB  02DC                      CALLS   #1,W^REG_SAVE
```

```
  007D'CF    006E'CF   DE  02E1    400          MOVAL   W^NAME_DLC15,W^ASC+ASCEFC$_NAME ; set 15 length name
                           02E8    401          $ASCEFC_G W^ASC
                           02F1    402          FAIL_CHECK SS$_IVLOGNAM          ; check for correct failure
        00000154 8F    DD  02F1                         PUSHL   #SS$_IVLOGNAM
       04E6'CF    01   FB  02F7                         CALLS   #1,W^REG_CHECK
                           02FC    403          $ASCEFC_S #64,W^NAME_DLC15       ; check _S form
                           0311    404          FAIL_CHECK SS$_IVLOGNAM          ; check for correct failure
        00000154 8F    DD  0311                         PUSHL   #SS$_IVLOGNAM
       04E6'CF    01   FB  0317                         CALLS   #1,W^REG_CHECK
                           031C    405 ;+
                           031C    406 ;
                           031C    407 ; test for need to have PRMCEB privilege
                           031C    408 ;
                           031C    409 ;-
                           031C    410          NEXT_TEST
                           031C
                           031C        STP11:
       0004'CF    0B   D0  031C                         MOVL    #11,W^CURRENT_TC
                  00   DD  0321                         PUSHL   #0
       04DC'CF    01   FB  0323                         CALLS   #1,W^REG_SAVE
                           0328    411          MODE    TO,10$,KRNL,NOREGS       ; kernal mode to access PHD
 59    00000000'9F     D0  0345    412          MOVL    @#CTL$GL_PHD,R9          ; get process header address
       0051'CF    69   DE  034C    413          MOVAL   PHD$Q_PRIVMSK(R9),W^PRIVMASK ; get priv mask address
                           0351    414          MODE    FROM,10$                 ; get back to user mode
                           0352    415          PRIV    REM,PRMCEB               ; remove PRMCEB priv.
  007D'CF    0059'CF   DE  0372    416          MOVAL   W^NAME_DLC,W^ASC+ASCEFC$_NAME ; set a legal name
                  00   DD  0379    417          PUSHL   #0                       ; push a dummy parameter
       04DC'CF    01   FB  037B    418          CALLS   #1,W^REG_SAVE            ; save the registers
                           0380    419          $ASCEFC_G W^ASC
                           0389    420          FAIL_CHECK SS$_NOPRIV            ; check for correct failure
                  24   DD  0389                         PUSHL   #SS$_NOPRIV
       04E6'CF    01   FB  038B                         CALLS   #1,W^REG_CHECK
                           0390    421          $ASCEFC_S #64,NAME_DLC,,#1       ; check _S form
                           03A7    422          FAIL_CHECK SS$_NOPRIV            ; check for correct failure
                  24   DD  03A7                         PUSHL   #SS$_NOPRIV
       04E6'CF    01   FB  03A9                         CALLS   #1,W^REG_CHECK
                           03AE    423          MODE    TO,20$,KRNL,NOREGS       ; kernal mode to access PHD
 59    00000000'9F     D0  03CB    424          MOVL    @#CTL$GL_PHD,R9          ; get process header address
       0051'CF    69   DE  03D2    425          MOVAL   PHD$Q_PRIVMSK(R9),W^PRIVMASK ; get priv mask address
                           03D7    426          MODE    FROM,20$                 ; get back to user mode
                           03D8    427          PRIV    ADD,PRMCEB               ; return PRMCEB priv.
```

```
                              03F8   429 .SBTTL SETEXV TESTS
                              03F8   430 ;+
                              03F8   431 ;
                              03F8   432 ; $SETEXV TESTS
                              03F8   433 ; test for page 0 access
                              03F8   434 ;
                              03F8   435 ;-
                              03F8   436         NEXT_TEST
                              03F8
                              03F8       STP12:
         0004'CF    0C    D0  03F8                       MOVL    #12,W^CURRENT_TC
                    00    DD  03FD                       PUSHL   #0
         04DC'CF    01    FB  03FF                       CALLS   #1,W^REG_SAVE
 0113'CF    0046'CF       DE  0404   437         MOVAL   W^SETEXV,W^SERV_NAME      ; set service name
                              040B   438         $SETEXV_G W^SET
                              0414   439         FAIL_CHECK SS$_ACCVIO              ; check for correct failure
                    0C    DD  0414                       PUSHL   #SS$_ACCVIO
         04E6'CF    01    FB  0416                       CALLS   #1,W^REG_CHECK
                              041B   440         $SETEXV_S W^VECTOR_SXV,0,-
                              041B   441               W^ACMODE_SXV,W^PRVHND_SXV40 ; check _S form
                              0430   442         FAIL_CHECK SS$_ACCVIO              ; check for correct failure
                    0C    DD  0430                       PUSHL   #SS$_ACCVIO
         04E6'CF    01    FB  0432                       CALLS   #1,W^REG_CHECK
                              0437   443 ;+
                              0437   444 ;
                              0437   445 ; test for read-only psect access
                              0437   446 ;
                              0437   447 ;-
                              0437   448         NEXT_TEST
                              0437
                              0437       STP13:
         0004'CF    0D    D0  0437                       MOVL    #13,W^CURRENT_TC
                    00    DD  043C                       PUSHL   #0
         04DC'CF    01    FB  043E                       CALLS   #1,W^REG_SAVE
 0099'CF    0095'CF       DE  0443   449         MOVAL   W^PRVHND_SXV41,W^SET+SETEXV$_PRVHND
                              044A   450         $SETEXV_G W^SET
                              0453   451         FAIL_CHECK SS$_ACCVIO              ; check for correct failure
                    0C    DD  0453                       PUSHL   #SS$_ACCVIO
         04E6'CF    01    FB  0455                       CALLS   #1,W^REG_CHECK
                              045A   452         $SETEXV_S W^VECTOR_SXV,0,-
                              045A   453               W^ACMODE_SXV,W^PRVHND_SXV41 ; check _S form
                              046F   454         FAIL_CHECK SS$_ACCVIO              ; check for correct failure
                    0C    DD  046F                       PUSHL   #SS$_ACCVIO
         04E6'CF    01    FB  0471                       CALLS   #1,W^REG_CHECK
                              0476   455 ;+
                              0476   456 ;
                              0476   457 ; test for noaccess psect protection
                              0476   458 ;
                              0476   459 ;-
                              0476   460         NEXT_TEST
                              0476
                              0476       STP14:
         0004'CF    0E    D0  0476                       MOVL    #14,W^CURRENT_TC
                    00    DD  047B                       PUSHL   #0
         04DC'CF    01    FB  047D                       CALLS   #1,W^REG_SAVE
 0099'CF    01FF'CF       DE  0482   461         MOVAL   W^PRVHND_SXV42,W^SET+SETEXV$_PRVHND
                              0489   462         $SETEXV_G W^SET
```

```
                                 0492   463          FAIL_CHECK SS$_ACCVIO           ; check for correct failure
                   0C      DD    0492                          PUSHL   #SS$_ACCVIO
         04E6'CF   01      FB    0494                          CALLS   #1,W^REG_CHECK
                                 0499   464          $SETEXV_S W^VECTOR_SXV,0,-
                                 0499   465                    W^ACMODE_SXV,W^PRVHND_SXV42 ; check _S form
                                 04AE   466          FAIL_CHECK SS$_ACCVIO           ; check for correct failure
                   0C      DD    04AE                          PUSHL   #SS$_ACCVIO
         04E6'CF   01      FB    04B0                          CALLS   #1,W^REG_CHECK
                                 04B5   467          TEST_END                        ; end the test
              004C'CF      DD    04B5                          PUSHL   W^TMD_ADDR
              0048'CF      DD    04B9                          PUSHL   W^TMN_ADDR
                   02      DD    04BD                          PUSHL   #2
              0044'CF      DD    04BF                          PUSHL   W^MOD_MSG_CODE
     00000000'GF   04      FB    04C3                          CALLS   #SST1,G^LIB$SIGNAL
0044'CF   01   1C  01      F0    04CA                          INSV    #1,#STS$V_INHIB_MSG,#1,W^MOD_MSG_CODE
              0044'CF      DD    04D1                          PUSHL   W^MOD_MSG_CODE
     00000000'GF   01      FB    04D5                          CALLS   #1,G^SYS$EXIT
```

```
                               04DC  .SBTTL REG_SAVE
                               04DC  ;++
                               04DC  ; FUNCTIONAL DESCRIPTION:
                               04DC  ;       Subroutine to save R2-R11 in the register save location.
                               04DC  ;
                               04DC  ; CALLING SEQUENCE:
                               04DC  ;       PUSHL   #0                 ; save a dummy parameter
                               04DC  ;       CALLS   #1,W^REG_SAVE      ; save R2-R11
                               04DC  ;
                               04DC  ; INPUT PARAMETERS:
                               04DC  ;       NONE
                               04DC  ;
                               04DC  ; OUTPUT PARAMETERS:
                               04DC  ;       NONE
                               04DC  ;
                               04DC  ;--
                               04DC
                               04DC  REG_SAVE:
                         0FFC  04DC          .WORD   ^M<R2,R3,R4,R5,R6,R7,R8,R9,R10,R11>
   0008'CF    14 AD   28   28  04DE          MOVC3   #4*10,^X14(FP),W^REG_SAVE_AREA  ; save the registers in the program
                           04  04E5          RET
                               04E6          .SBTTL  REG_CHECK
                               04E6  ;++
                               04E6  ; FUNCTIONAL DESCRIPTION:
                               04E6  ;       Subroutine to test R0 & R2-R11 for proper content after a service
                               04E6  ;       execution. A snapshot is taken by the REG_SAVE routine at the
                               04E6  ;       beginning of each step and this routine is executed after the
                               04E6  ;       services have been executed.
                               04E6  ;
                               04E6  ; CALLING SEQUENCE:
                               04E6  ;       PUSHL   #SS$_XXXXXX       ; push expected R0 contents
                               04E6  ;       CALLS   #1,W^REG_CHECK    ; execute this routine
                               04E6  ;
                               04E6  ; INPUT PARAMETERS:
                               04E6  ;       expected R0 contents on the stack
                               04E6  ;
                               04E6  ; OUTPUT PARAMETERS:
                               04E6  ;       possible error messages printed using $PUTMSG
                               04E6  ;
                               04E6  ;--
                               04E6
                               04E6  REG_CHECK:
                         0FFC  04E6          .WORD   ^M<R2,R3,R4,R5,R6,R7,R8,R9,R10,R11>
          50   04 AC       D1  04E8          CMPL    4(AP),R0                          ; is this the right fail code?
                     0E    13  04EC          BEQL    10$                               ; br if yes
                     50    DD  04EE          PUSHL   R0                                ; push received data
                  04 AC    DD  04F0          PUSHL   4(AP)                             ; push expected data
                012B'CF    DF  04F3          PUSHAL  W^EXP                             ; push the string variable
        052E'CF      03    FB  04F7          CALLS   #3,W^PRINT_FAIL                   ; print the error message
                               04FC  10$:
   0008'CF    14 AD   28   29  04FC          CMPC3   #4*10,^X14(FP),W^REG_SAVE_AREA    ; check all but R0
                      28   13  0503          BEQL    20$                               ; br if O.K.
 56    53   00000008'8F    C3  0505          SUBL3   #REG_SAVE_AREA,R3,R6              ; calculate the register number
                 56   04   C6  050D          DIVL2   #4,R6
      00AF'CF    56   02   81  0510          ADDB3   #^X2,R6,W^REGNUM                  ; put it in the string
                 51   03   CA  0516          BICL2   #3,R1                             ; backup to register boundry
                 53   03   CA  0519          BICL2   #3,R3
```

```
              00AF'CF    DD  051C         PUSHL   W^REGNUM                        ; push register number
                   61    DD  0520         PUSHL   (R1)                            ; push received data
                   63    DD  0522         PUSHL   (R3)                            ; push expected data
              009D'CF    DF  0524         PUSHAL  W^REG                           ; set string pntr param.
         052E'CF    04   FB  0528         CALLS   #4,W^PRINT_FAIL                 ; print the error message
                             052D     20$:
                         04  052D         RET
                             052E         .SBTTL  PRINT_FAIL
                             052E     ;++
                             052E     ; FUNCTIONAL DESCRIPTION:
                             052E     ;       Subroutine to report failures using $PUTMSG
                             052E     ;
                             052E     ; CALLING SEQUENCE:
                             052E     ; Mode  #1      PUSHL EXPECTED  Mode    #2      PUSHL REG_NUMBER
                             052E     ;               PUSHL RECEIVED                  PUSHL EXPECTED
                             052E     ;               PUSHAL STRING_VAR               PUSHL RECEIVED
                             052E     ;               CALLS #3,W^PRINT_FAIL           PUSHAL STRING_VAR
                             052E     ;                                               CALLS #4,W^PRINT_FAIL
                             052E     ;
                             052E     ; INPUT PARAMETERS:
                             052E     ;       listed above
                             052E     ;
                             052E     ; OUTPUT PARAMETERS:
                             052E     ;       an error message is printed using $PUTMSG
                             052E     ;
                             052E     ;--
                             052E
                             052E     PRINT_FAIL:
                       003C  052E         .WORD   ^M<R2,R3,R4,R5>
                             0530         $FAO_S  W^CS1,W^MESSAGEL,W^MSGL,#TEST_MOD_NAME,W^SERV_NAME,W^CURRENT_TC
                             0551         PUTMSG  <#UETP$_TEXT,#1,#MESSAGEL>      ; print the message
              04    6C   91  0566         CMPB    (AP),#4                         ; is this a register message?
                    21   13  0569         BEQL    10$                             ; br if yes
                             056B         $FAO_S  W^CS2,W^MESSAGEL,W^MSGL,4(AP),8(AP),4(AP),12(AP)
                    25   11  058A         BRB     20$                             ; goto output message
                             058C     10$:
                             058C         $FAO_S  W^CS3,W^MESSAGEL,W^MSGL,4(AP),16(AP),8(AP),4(AP),16(AP),12(AP)
                             05B1     20$:
                             05B1         PUTMSG  <#UETP$_TEXT,#1,#MESSAGEL>      ; print the message
      004C'CF    002A'CF     DE  05C6         MOVAL   W^TEST_MOD_FAIL,W^TMD_ADDR      ; set failure message address
 0044'CF   03    00    02    F0  05CD         INSV    #ERROR,#0,#3,W^MOD_MSG_CODE     ; set severity code
                         04  05D4         RET
```

```
                            05D5          .SBTTL  MOD_MSG_PRINT
                            05D5  MOD_MSG_PRINT:
                            05D5  ;
                            05D5  ;  ****************************************************************
                            05D5  ;  *                                                              *
                            05D5  ;  *  PRINTS THE TEST MODULE BEGUN/SUCCESSFUL/FAILED MESSAGES     *
                            05D5  ;  *       (USING THE PUTMSG MACRO).                              *
                            05D5  ;  *                                                              *
                            05D5  ;  ****************************************************************
                            05D5  ;
                            05D5          PUTMSG  <W^MOD_MSG_CODE,#2,W^TMN_ADDR,W^TMD_ADDR> ; PRINT MSG
                       05   05EA          RSB                               ; ... AND RETURN TO CALLER
                            05EB  ;
                            05EB          .SBTTL  CHMRTN
                            05EB  CHMRTN:
                            05EB  ; ****************************************************************
                            05EB  ; *                                                              *
                            05EB  ; *     CHANGE MODE ROUTINE. THIS ROUTINE GETS CONTROL WHENEVER  *
                            05EB  ; *     A CMKRNL, CMEXEC, OR CMSUP SYSTEM SERVICE IS ISSUED      *
                            05EB  ; *     BY THE MODE MACRO ('TO' OPTION).  IT MERELY DOES         *
                            05EB  ; *     A JUMP INDIRECT ON A FIELD SET UP BY MODE. IT HAS        *
                            05EB  ; *     THE EFFECT OF RETURNING TO THE END OF THE MODE           *
                            05EB  ; *     MACRO EXPANSION.                                         *
                            05EB  ; *                                                              *
                            05EB  ; ****************************************************************
                            05EB  ;
                     0000   05EB          .WORD   0                         ; ENTRY MASK
      00000059'FF      17   05ED          JMP     @CHM_CONT                 ; RETURN TO MODE MACRO IN NEW MODE
                            05F3  ;
                            05F3  ; *     RET INSTR WILL BE ISSUED IN EXPANSION OF 'MODE FROM, ....' MACRO
                            05F3  ;
                            05F3          .END    SATSSF01
```

```
$$ARGS                  = 00000004                  RETADR                    0000005D R    03
$$T1                    = 00000004                  SATSSF01                  00000000 RG   06
$$T2                    = 00000009                  SERV_NAME                 00000113 R    03
ACMODE_SXV                00000091 R    02          SET                       00000089 R    03
ASC                       00000075 R    03          SETEXV                    00000046 R    02
ASCEFC                    0000003F R    02          SETEXV$_ACMODE          = 0000000C
ASCEFC$_EFN             = 00000004                  SETEXV$_ADDRES          = 00000008
ASCEFC$_NAME            = 00000008                  SETEXV$_NARGS           = 00000004
ASCEFC$_NARGS           = 00000004                  SETEXV$_PRVHND          = 00000010
ASCEFC$_PERM            = 00000010                  SETEXV$_VECTOR          = 00000004
ASCEFC$_PROT            = 0000000C                  SEVERE                  = 00000004
BUF                       000000BB R    03          SHR$K_SHRDEF            = 00000001
CHMRTN                    000005EB R    06          SHR$_TEXT               = 00001130
CHM_CONT                  00000059 R    03          SS$_ACCVIO              = 0000000C
CS1                       00000099 R    02          SS$_ILLEFC              = 000000EC
CS2                       000000CB R    02          SS$_IVLOGNAM            = 00000154
CS3                       000000F8 R    02          SS$_NOPRIV              = 00000024
CTL$GL_PHD                ********   X  06          STEP                    = 0000000E
CURRENT_TC                00000004 R    03          STP0                      0000003D R    06
DAC                       00000065 R    03          STP1                      00000085 R    06
DACEFC                    00000031 R    02          STP10                     000002D5 R    06
DACEFC$_EFN             = 00000004                  STP11                     0000031C R    06
DACEFC$_NARGS           = 00000001                  STP12                     000003F8 R    06
DLC                       0000006D R    03          STP13                     00000437 R    06
DLCEFC                    00000038 R    02          STP14                     00000476 R    06
DLCEFC$_NAME            = 00000004                  STP2                      000000BE R    06
DLCEFC$_NARGS           = 00000001                  STP3                      000000FF R    06
EMPTY                     00000000 R    04          STP4                      0000013C R    06
ERROR                   = 00000002                  STP5                      00000179 R    06
EXP                       0000012B R    02          STP6                      000001BC R    06
INADR                     0000004D R    02          STP7                      000001FD R    06
INFO                    = 00000003                  STP8                      00000246 R    06
LIB$SIGNAL                ********   X  06          STP9                      0000028E R    06
MESSAGEL                  0000010B R    03          STS$V_INHIB_MSG         = 0000001C
MOD_MSG_CODE              00000044 R    03          SUCCESS                 = 00000001
MOD_MSG_PRINT             000005D5 R    06          SYS$ASCEFC                ********  GX  06
MSGL                      000000B3 R    03          SYS$CMKRNL                ********  GX  06
NAME_DLC                  00000059 R    02          SYS$DACEFC                ********  GX  06
NAME_DLC0                 00000066 R    02          SYS$DLCEFC                ********  GX  06
NAME_DLC15                0000006E R    02          SYS$EXIT                  ********  GX  06
NOACCESS                  00000000 R    05          SYS$FAO                   ********   X  06
PHD$Q_PRIVMSK           = 00000000                  SYS$HIBER                 ********  GX  06
PRINT_FAIL                0000052E R    06          SYS$SETEXV                ********  GX  06
PRIVMASK                  00000051 R    03          SYS$SETPRN                ********  GX  06
PRIV_ARGS               = 00000002                  SYS$SETPRT                ********  GX  06
PROT                      00000055 R    02          SYS$SETPRV                ********  GX  06
PRT$C_NA                  ********   X  02          SYS$WAKE                  ********  GX  06
PRV$V_PRMCEB            = 0000000A                  TEST_MOD_BEGIN            00000019 R    02
PRVHND_SXV40            = 00000001                  TEST_MOD_FAIL             0000002A R    02
PRVHND_SXV41              00000095 R    02          TEST_MOD_NAME             00000000 R    02
PRVHND_SXV42            = 000001FF R    04          TEST_MOD_NAME_D           00000009 R    02
PRVPRT                    00000050 R    03          TEST_MOD_SUCC             0000001F R    02
REG                       0000009D R    03          TMD_ADDR                  0000004C R    03
REGNUM                    000000AF R    03          TMN_ADDR                  00000048 R    03
REG_CHECK                 000004E6 R    06          TPID                      00000000 R    03
REG_SAVE                  000004DC R    06          UETP$_SATSMS            = 007480D9
REG_SAVE_AREA             00000008 R    03          UETP$_TEXT              = 00741133
```

```
                                                                        E 1
SATSSF01                    - SATS SYSTEM SERVICE TESTS  (FAILING S. 16-SEP-1984 00:30:10  VAX/VMS Macro V04-00        Page  20
Symbol table                                                          5-SEP-1984 04:27:16  [UETPSY.SRC]SATSSF01.MAR;1        (1)

VECTOR_SXV                    0000008D R      02
WARNING                     = 00000000

                                              +----------------+
                                              ! Psect synopsis !
                                              +----------------+

PSECT name                  Allocation           PSECT No.  Attributes
----------                  ----------           ---------  ----------
.  ABS  .                   00000000  (     0.)  00 (   0.)  NOPIC    USR    CON    ABS    LCL NOSHR NOEXE NORD   NOWRT NOVEC BYTE
$ABS$                       00000000  (     0.)  01 (   1.)  NOPIC    USR    CON    ABS    LCL NOSHR   EXE   RD     WRT NOVEC BYTE
RODATA                      00000139  (   313.)  02 (   2.)  NOPIC    USR    CON    REL    LCL NOSHR NOEXE   RD   NOWRT NOVEC LONG
RWDATA                      00000117  (   279.)  03 (   3.)  NOPIC    USR    CON    REL    LCL NOSHR NOEXE   RD     WRT NOVEC LONG
SATS_ACCVIO_1               00000200  (   512.)  04 (   4.)  NOPIC    USR    CON    REL    LCL NOSHR NOEXE   RD     WRT NOVEC PAGE
SATS_ACCVIO_2               00000200  (   512.)  05 (   5.)  NOPIC    USR    CON    REL    LCL NOSHR NOEXE   RD     WRT NOVEC PAGE
SATSSF01                    000005F3  (  1523.)  06 (   6.)  NOPIC    USR    CON    REL    LCL NOSHR   EXE   RD     WRT NOVEC LONG

                                          +------------------------+
                                          ! Performance indicators !
                                          +------------------------+

Phase                    Page faults    CPU Time       Elapsed Time
-----                    -----------    --------       ------------
Initialization                    30    00:00:00.06    00:00:00.80
Command processing               113    00:00:00.67    00:00:02.19
Pass 1                           392    00:00:13.04    00:00:26.28
Symbol table sort                  0    00:00:01.56    00:00:02.84
Pass 2                           144    00:00:02.92    00:00:05.54
Symbol table output               17    00:00:00.11    00:00:00.11
Psect synopsis output              5    00:00:00.03    00:00:00.03
Cross-reference output             0    00:00:00.00    00:00:00.00
Assembler run totals             703    00:00:18.39    00:00:37.79

The working set limit was 1350 pages.
79290 bytes (155 pages) of virtual memory were used to buffer the intermediate code.
There were 60 pages of symbol table space allocated to hold 999 non-local and 8 local symbols.
600 source lines were read in Pass 1, producing 30 object records in Pass 2.
58 pages of virtual memory were used to define 53 macros.

                                         +--------------------------+
                                         ! Macro library statistics !
                                         +--------------------------+

Macro library name                       Macros defined
------------------                       --------------
_$255$DUA28:[SHRLIB]UETP.MLB;1                 12
_$255$DUA28:[SYS.OBJ]LIB.MLB;1                  2
_$255$DUA28:[SYSLIB]STARLET.MLB;2              36
TOTALS (all libraries)                         50

1328 GETS were required to define 50 macros.

There were no errors, warnings or information messages.

MACRO/LIS=LIS$:SATSSF01/OBJ=OBJ$:SATSSF01 MSRC$:SATSSF01/UPDATE=(ENH$:SATSSF01)+EXECML$/LIB+SHRLIB$:UETP/LIB
```

0416 AH-BT13A-SE
VAX/VMS V4.0

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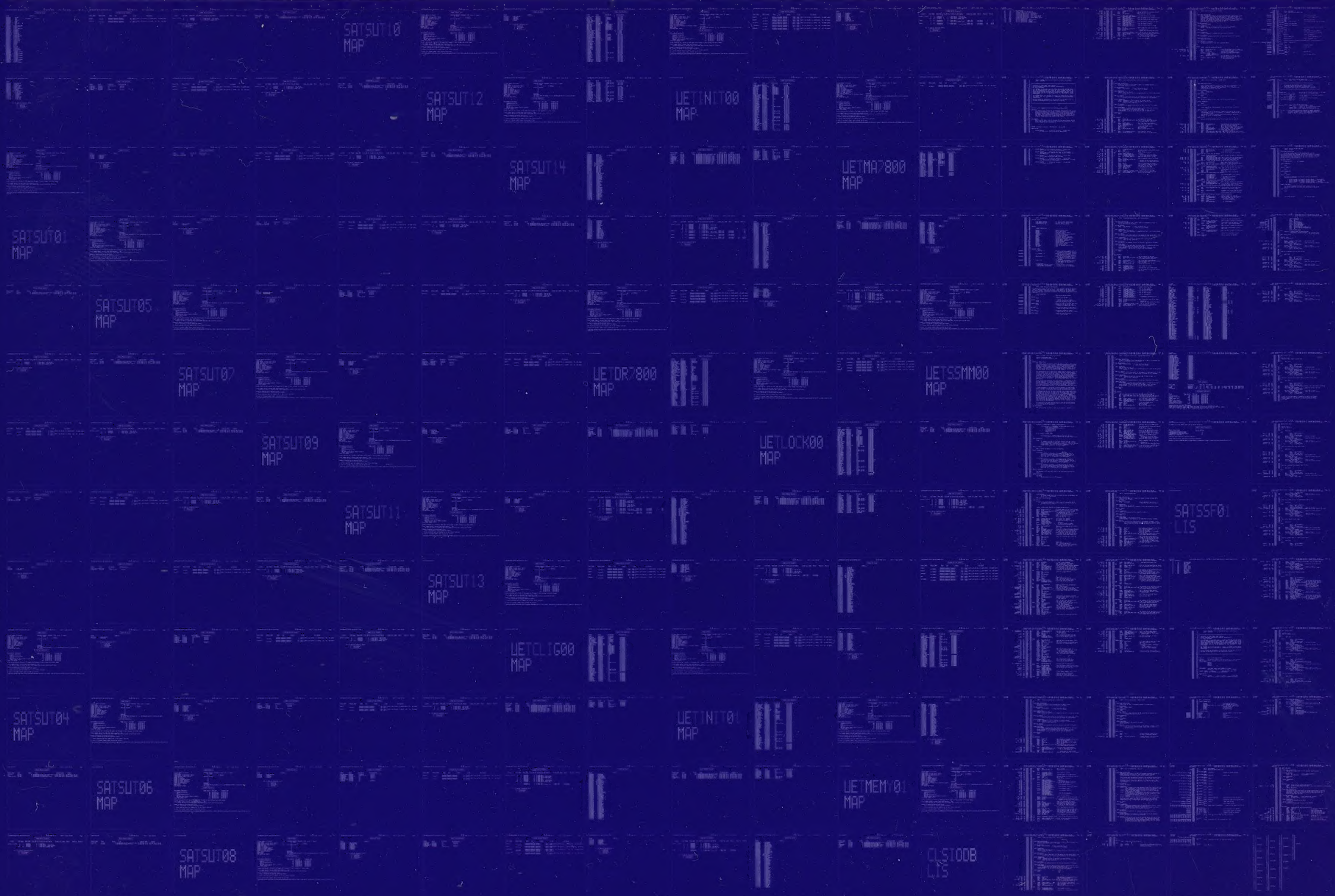

SATSUT10 MAP

SATSUT12 MAP

UETINIT00 MAP

SATSUT14 MAP

UETMA7800 MAP

SATSUT01 MAP

SATSUT05 MAP

SATSUT07 MAP

UETDR7800 MAP

UETSSMM00 MAP

SATSUT09 MAP

UETLOCK00 MAP

SATSUT11 MAP

SATSSF01 LIS

SATSUT13 MAP

UETCLIG00 MAP

SATSUT04 MAP

UETINIT01 MAP

SATSUT06 MAP

UETMEMY01 MAP

SATSUT08 MAP

CLSIODB LIS

0417 AH-BT13A-SE
VAX/VMS V4.0

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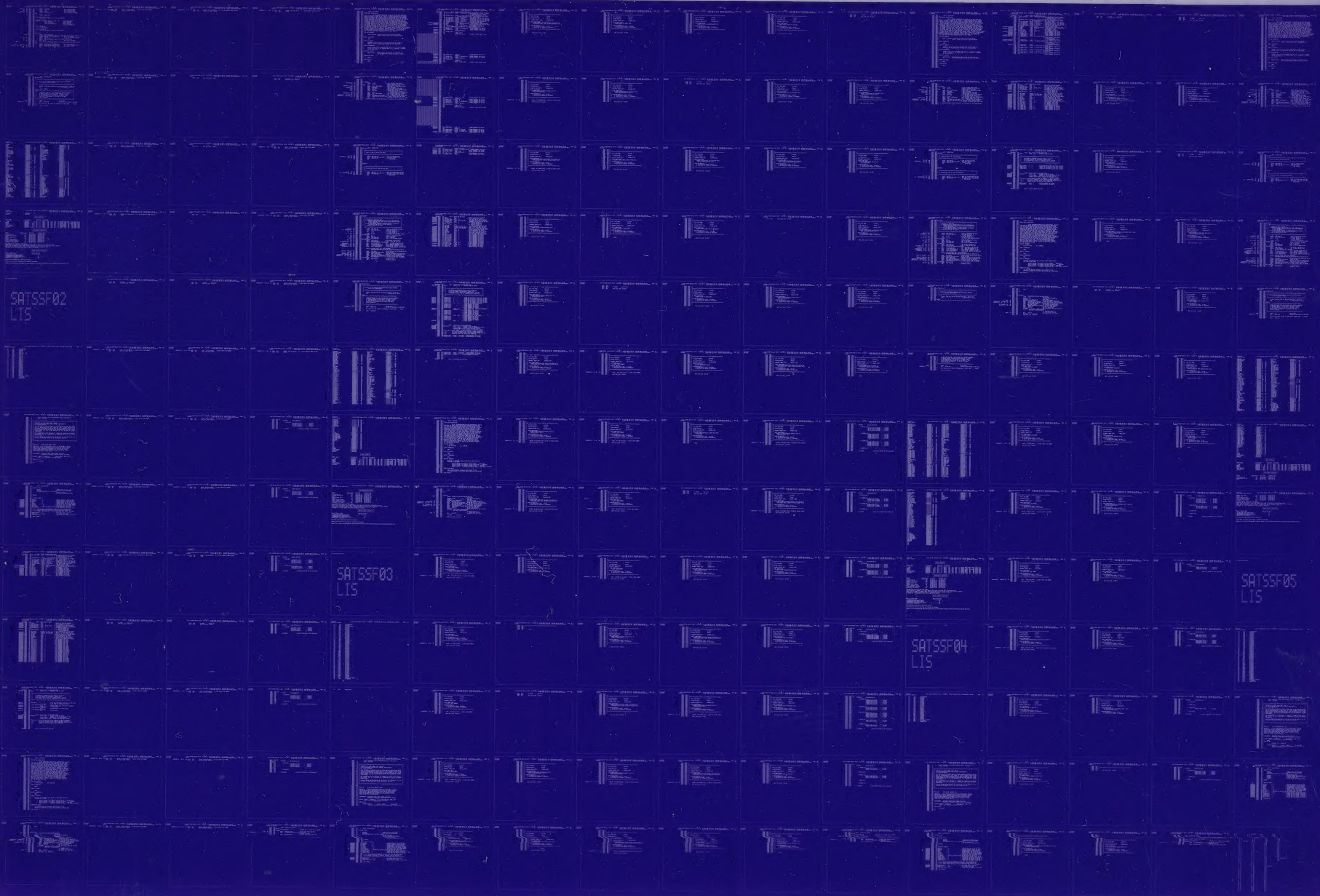

SATSSF02
LIS

SATSSF03
LIS

SATSSF04
LIS

SATSSF05
LIS